

EXHIBIT 3

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Scope of Report and Summary of Conclusions

I was asked to address Dr. Swanson's report, in particular his analysis regarding racial disparities in voter participation and disparities in proximity to polling places.

My conclusions are as follows:

- First, Dr. Swanson overestimates both Black and White turnout in Mississippi. His estimates of Black turnout are further biased because he fails to account for racial differences in the extent to which people overreport voting in surveys. The unreliability of Dr. Swanson's estimates is easily established because his overall turnout estimates imply that there were hundreds of thousands more voters participating than the vote counts reported by the Mississippi Secretary of State.
- Second, in light of Dr. Swanson's analyses and criticisms, I conducted additional analyses that do not rely on self-reports of voter turnout, which confirm that Black voter turnout in Mississippi is in fact lower than White voter turnout. These analyses yield estimates of turnout for Black and White voters that are similar to each other despite the use of multiple data sources and methods of estimation, which is evidence that they are reliable. These estimates also are closer to the true turnout numbers based on actual vote counts reported by the Mississippi Secretary of State than Dr. Swanson's, which further shows that these estimates are more reliable.
- Third, polling place distance in isolation, as reported by Dr. Swanson, is a poor indicator of Black voter turnout or relative ease of access to the voting process. Among other things, scholarly studies of polling place distance typically account for access to a vehicle, among other factors, because the effects of polling place distance are different depending on whether a person has a car. However, Dr. Swanson fails to consider access to a vehicle in his analysis. As I note, Black people in Mississippi are more than three times as likely to lack access to a car than White people. The increased difficulty in accessing polling places that results from this disparity in access to a car is far more salient than the minor purported "advantage" Black Mississippians have in terms of polling place distance, assuming Dr. Swanson's analysis of relative polling place distance is correct.
- Fourth, there are many aspects of polling place experience that could discourage voting apart from polling place distance. Considering wait times, for instance, shows that Black people have longer wait times in Mississippi than White people.
- Finally, with respect to Senate Factor 5 overall, Black people in Mississippi face discrimination in education, income, housing, employment, and criminal justice that dramatically affect life outcomes, including voting. In both my initial report

and again here, I have provided evidence to demonstrate the existence and effects of long-term and contemporary discrimination on the ability of Black Mississippians to participate in the political process.

Dr. Swanson's Estimates of Voter Turnout by Race

Dr. Swanson's estimates of voter turnout by race are based on his analysis of the Current Population Survey Voting and Registration Supplement (CPS). Dr. Swanson estimates based on the CPS that 69.8% of White non-Hispanic Mississippi residents and 72.9% of Black alone or in combination Mississippi residents voted in the 2020 General Election. In total, Dr. Swanson estimates that 1,531,000 Mississippians voted in the November 2020 General Election, a turnout rate of 70.3%.¹

However, the official vote counts certified by the Mississippi Secretary of State show that only 1,313,759 votes² were cast for President (the highest participation race) in Mississippi in the November 2020 general election, which represents 58.7% of the citizen voting age population of Mississippi.³ Dr. Swanson's estimate is nearly 12 percentage points higher than the true turnout rate based on actual votes cast and overestimates the vote total by more than 200,000 votes. This 12% overestimation shows that CPS is not reliable as a benchmark for voter turnout. As I discuss below, neither is it a reliable benchmark for voter turnout by race.

As noted above, by race, Dr. Swanson estimates based on the CPS that 69.8% of White non-Hispanic Mississippi residents and 72.9% of Black alone or in combination Mississippi residents voted in the 2020 General Election. Similarly, he concludes in his report that, based on his analysis of a Mississippi State University Poll, in 2020 reported voter "frequency," or the number of people in Mississippi who say that they always vote, was "68.22% for Whites and 72.1% for Blacks"⁴—rates close to those estimated from the CPS. However, based on my research into the matter, Dr. Swanson's analysis is flawed because his analysis of *both* surveys suffers from the same problem: he fails to adjust or otherwise account for overreporting generally, and for differential overreporting of voter turnout by race in particular.

Dr. Swanson acknowledges the issue of overreporting in his report when positing that the purported advantage he claims Black Mississippians have in terms of proximity to polling places "may offset to some degree the likelihood of over-reporting."⁵ This supposition is incorrect, as I will show below. But for now, this statement shows that Dr. Swanson and I agree that overreporting of voting in surveys is a known issue. However, new research shows that not only

¹ Swanson Report, p. 70.

² Mississippi Secretary of State. "Official Results." Available online from <https://www.sos.ms.gov/elections/electionresults/2020%20GE%20Statewide%20Recapitulation%20Report.pdf>. Accessed 20 Jan 2023.

³ U.S. Census Bureau. "Citizen Voting Age Population by Race and Ethnicity." Available online from <https://www.census.gov/programs-surveys/decennial-census/about/voting-rights/cvap.html>. Accessed 20 Jan 2023.

⁴ Swanson Report, p. 84.

⁵ Swanson Report, p. 84.

does the CPS overestimate turnout for all groups, it does so differentially by race, such that it consistently overestimates Black turnout even more so than White turnout.⁶ This research finds that it is not appropriate to conclude that there is no gap in turnout between Black and White Mississippi voters based on the CPS.

In their 2022 article, which was published recently in a peer-reviewed political science journal, Ansolabehere, Fraga, and Schaffner compare estimates of voter turnout by race from the CPS for multiple states to the Cooperative Election Study as well as to statewide voter files for those states where race is recorded. They find systematic overreporting of voting in the CPS for all racial groups. However, they also show that overreporting is more pronounced among Black voters. Ansolabehere, Fraga, and Schaffner find that the tendency to overreport voting differently by race leads the CPS to underestimate the size of the racial gap in turnout between Black and White voters in multiple states. The bias may stem from problems with the CPS sample, such as a difference in attrition from the survey, or from differences in the tendency to overreport voting.⁷ As a result of these problems with the CPS, researchers should “use caution when making inferences about variation in turnout rates by racial and ethnic groups”⁸ based on the CPS alone.

In sum, Dr. Swanson’s opinion that 69.8% of White non-Hispanic Mississippi residents and 72.9% of Black alone or in combination Mississippi residents voted in the 2020 General Election, as well as his similar opinions about turnout in other elections, is not correct.

Dr. Swanson’s Criticisms of My Analysis

In my initial report, I used CPS data to estimate 56% White and 53% Black turnout in Mississippi for the November 2020 General Election. These estimates are relatively close to the observed turnout rate of 58.7% based on Secretary of State data, and substantially closer than the over 70% turnout figure Dr. Swanson presents.

However, Dr. Swanson is correct that the estimates in my initial report reflect a calculation error. When I was working with the table of CPS data I used, I thought that the educational attainment variable that I was using excluded children. However, it actually reports educational attainment for people ages 15 and older, so for each educational level, the total includes teens aged 15-17. There are no children younger than that in the “Less than High School” category, as evidenced by the fact that cells F10, F11, F12 are 0. Dr. Swanson correctly points out that primarily, this error affects the “Less than High School” calculations and not the other educational levels.⁹ I also calculated total turnout for both racial groups incorrectly. When

⁶ Ansolabehere, Stephen, Bernard L. Fraga, and Brian F. Schaffner. "The Current Population Survey Voting and Registration Supplement Overstates Minority Turnout." *The Journal of Politics* 84.3 (2022): 1850:1855.

⁷ Ansolabehere et al. 2022: 1853-54.

⁸ Ansolabehere et al. 2022: 1854.

⁹ Dr. Swanson’s assessment of the source of this error is not accurate. He writes “Here, Dr. Burch is vague about the source of the information she presents in the pre-ceding exhibit and does not describe the steps she undertook to produce it. Since these statistics of voting by

Column F is subtracted from the denominator, the turnout figures calculated using CPS are consistent with those presented in Dr. Swanson's report.

When I wrote my initial report, I relied on the CPS to estimate turnout by education because the estimates that I produced were in line with turnout based on the actual vote count and thus did not lead me to believe that something was amiss. I also was unaware of the Ansolabehere et al. article that was published right before I wrote this report-- I last researched turnout and the CPS only a few weeks before that article was published. I found the new article when reviewing the literature again in response to the estimates of turnout in Dr. Swanson's report, which I found surprising. I now think, based on the strong evidence of bias in the CPS, it makes sense to "use caution when making inferences about variation in turnout rates by racial and ethnic groups,"¹⁰ and therefore that the CPS really should be considered only in comparison with estimates from other data sources that estimate voter turnout by race in ways that do not rely on self-reporting.

Methodology and Analysis of Validated Voter Turnout: Cooperative Election Study

Because, as discussed above, turnout estimates in the CPS are unreliable not just because of overreporting in general, but because of differences in overreporting by race in particular, I conducted additional analyses which employed alternative methods of looking at turnout by race that do not rely on self-reported voter turnout. These additional analyses also are consistent with my conclusion that Black voter turnout is lower than white turnout and inconsistent with those produced by Dr. Swanson.

Because much of the bias in turnout estimates based on the CPS has to do with differential overreporting of voting by race,¹¹ it is necessary to examine alternative sources that do not depend on self-reporting of turnout to estimate turnout by race in Mississippi. First, I examine the 2020 Cooperative Election Study (CES), which contains a sample of 462¹²

education level by state are not readily available in official published tables . . . " Swanson Report, p. 75. In fact, I downloaded a table from the census website using their online table generator; I have included that table in the Appendix. I did not conduct "an analysis and interpretation of the CPS "raw data" (or CPS "PUMS") data alluded to earlier" and my error was not in working with the raw data or writing software code. Swanson Report, p. 76. Instead, I calculated turnout from this table, dividing the numerator, column G, over the denominator, column B. That was incorrect. I also should have subtracted Column F, not in universe, from the denominator as well.

¹⁰ Ansolabehere et al. 2022: 1854.

¹¹ Ansolabehere et al. 2022; see also Enamorado, Ted, and Kosuke Imai. "Validating self-reported turnout by linking public opinion surveys with administrative records." *Public Opinion Quarterly* 83.4 (2019): 723-748.

¹² This number is above the minimum sample size to detect small effects (Cohen's $d = .2$) with a standard level of statistical power ($=.8$) and significance level of .05. See Singh, Ajay S., and Micah B. Masuku. "Sampling techniques & determination of sample size in applied statistics research: An overview." *International Journal of economics, commerce and management* 2.11 (2014): 1-22.

Mississippi adults (unweighted).¹³ The CES, although it is a survey, independently validates voter registration and turnout for respondents by attempting to match respondents to a database of registered voters maintained by Catalist, a corporation that maintains a national database of voters.¹⁴ Catalist updates their information on voter registration and history with data directly from states.¹⁵ In my analysis, I use the measure of validated voter turnout rather than self-reported voter turnout to estimate racial gaps in turnout, distinguishing this survey from the unvalidated self-reported turnout from CPS or Mississippi State University analyzed by Dr. Swanson.

To analyze the survey, I employ logit regression analysis. Generally, regression analysis is a statistical technique that is designed to look for relationships between an independent variable and a dependent variable.¹⁶ Multiple regression analysis also may involve the use of control variables, which would allow for the analysis of the relationship between an independent variable and a dependent variable after accounting for these additional factors.¹⁷ I examine the relationship between a respondent's race and their validated voter turnout. Because the dependent variable, validated voter turnout, is dichotomous, I use logit rather than ordinary-least-squares regression.¹⁸ However, because logit coefficients are difficult to interpret for lay readers, I include the regression tables of my results in the Appendix and report the results graphically in Figures 1 and 2 below.¹⁹

In the Mississippi sample of the CES,²⁰ the CES team was able to validate that 53% of Mississippi respondents voted in the 2020 General Election. This estimate, while lower than the 58.7% benchmark, is still much closer to the actual turnout than the 70.3% number estimated by

¹³ Ansolabehere, Stephen, Brian F. Schaffner, and Sam Luks, COOPERATIVE ELECTION STUDY, 2020: COMMON CONTENT. [Computer File] Release 2: August 4th, 2021. Cambridge, MA: Harvard University [producer] <http://cces.gov.harvard.edu>.

¹⁴ Ansolabehere, Stephen, Brian F. Schaffner, and Sam Luks, "Guide to the 2020 Cooperative Election Study." Release 2: August 4th, 2021. Cambridge, MA: Harvard University [producer] <http://cces.gov.harvard.edu>: 19.

¹⁵ Ansolabehere et al., "Guide to the 2020 Cooperative Election Study," 2021.

¹⁶ Chatterjee, Samprit, and Jeffrey S. Simonoff. *Handbook of regression analysis*. John Wiley & Sons, 2013.

¹⁷ Chatterjee and Simonoff 2013: 10.

¹⁸ Logit regression is designed for predicting dependent variables that take on only two values, rather than ordinary-least-squares regression, which is for dependent variables that are continuous. Chatterjee and Simonoff 2013: 150.

¹⁹ The columns in the figures report the estimated probability of voting and are calculated using the equation $\text{pr}(\text{voting}) = \frac{1}{1 + e^{-(B_0 + xB_1 \dots)}}$, where $B_0, B_1 \dots$ are the estimated coefficients in the models.

²⁰ Including only Mississippi U.S. Citizens in the analysis and weighting by the variable "commonweight." All CES respondents are adults.

Dr. Swanson from the CPS. Breaking the CES data down further by race,²¹ 60% of White respondents and 46% of Black respondents voted in Mississippi in the 2020 General Election. My regression analysis of validated turnout by race in the CES confirms these percentages, finding the same large, statistically significant gap between Black and White Mississippi voters. As I report in Figure 1, calculating the probability of voting in the 2020 General Election (based on the regression coefficients in the first column of Table 2 in the appendix) shows that 60% of White respondents voted in the 2020 General Election, compared with 46% of Black Mississippi respondents.

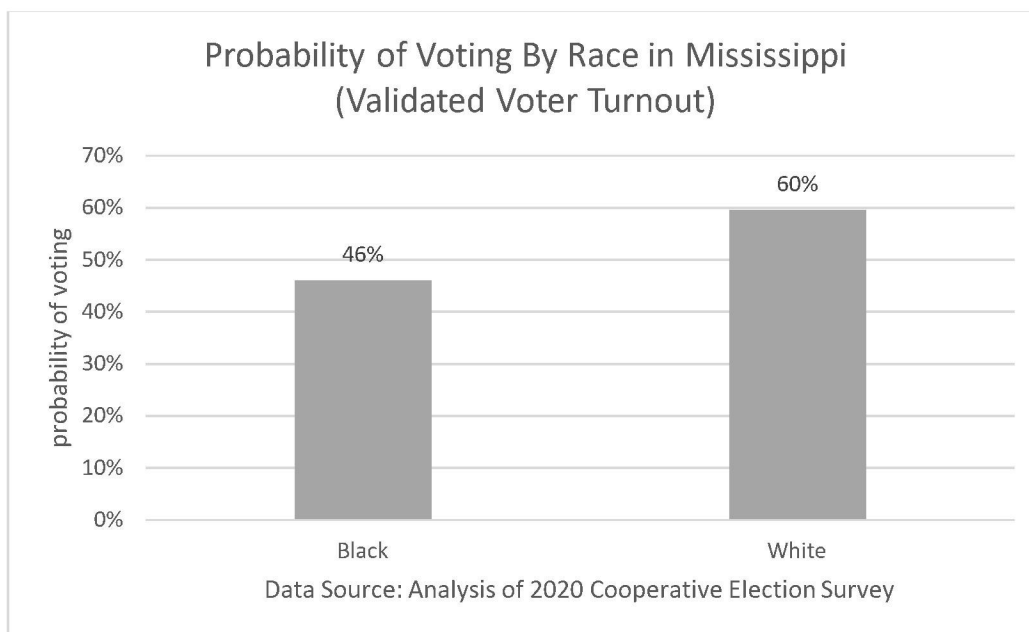


Figure 1: Probability of voting by race in Mississippi. *Source: Author's analysis of 2020 CES included in column 1 of table 2 in the appendix.*

It is also worth noting that the CES allows us to examine overreporting of voting. Comparing self-reported voter turnout to validated voter turnout shows substantial overreporting of voting. The CES team was able to validate in Catalist that 74% of the White Mississippi respondents who said they voted actually did so, but were only able to validate that 57% of the Black Mississippi respondents who said they voted did so.²² Thus, as the CES shows, corroborating the recent work of Ansolabehere et al. discussed supra, differential over-reporting of voter turnout by race is an important phenomenon that affects estimates of voter turnout in Mississippi and demonstrates the problems with relying only on self-reported voting to estimate racial differences in turnout.

²¹ The CES race question analyzed in this report asks: “What racial or ethnic group best describes you?” and provides the following responses: White, Black, Hispanic, Asian, Native American, Middle Eastern, Two or More Races, Other.

²² For this analysis, which includes reported voter turnout, I weighted the sample by the variable “commonpostweight.”

Effects of Educational Discrimination on Black Voter Turnout

In his report, Dr. Swanson argued that Black Mississippians vote at higher rates than White Mississippians at every educational level and thus argued that educational attainment does not detrimentally affect Black voter turnout. This conclusion is inaccurate because it relies on the CPS, which I have shown to produce biased estimates, and because it ignores the point that I make in my original report with respect to differences in educational attainment by race in Mississippi. I discuss these two points below.

My original purpose for including the CPS analysis in my first report was to show the importance of education and socioeconomic status, arenas in which Black Mississippians face discrimination, to shaping the racial gap in voter turnout. Due to the problems with reliance on CPS discussed above, for this report, I seek to reinforce and corroborate my conclusions regarding the effects of educational discrimination on Black voter turnout by deploying multiple regression analysis on the CES to examine the relationship between race and validated voter turnout while holding educational attainment constant. Multiple regression allows us to begin to compare apples to apples—for instance, comparing turnout between Black and White people with the same educational level. As I note earlier, there is a large and statistically significant gap in voter turnout overall between Black and White Mississippi residents: White turnout in the 2020 General Election is estimated to be 60%, while Black turnout is estimated to be 46%.

Further analysis shows that this large, 14 percentage point gap in turnout mostly comes from the distribution of racial groups across educational levels, rather than from differential voter turnout within each educational level. In other words, the racial gap comes less from the fact that Black people with college degrees vote less than White people with college degrees, but rather from the fact that there are proportionally fewer Black people in Mississippi with college degrees than White people.

We can see this phenomenon in Figure 2, which calculates the probability of having a validated vote for men born in 1972 by race and education among CES respondents in Mississippi using the regression coefficients reported in the second column of Appendix Table 2. In the figure, the probability of voting increases with educational attainment for both racial groups. Within each educational level, there is a small racial disparity in turnout, such that White respondents appear more likely to vote than Black respondents. However, in this multivariate analysis, the Black-White racial disparity is not statistically significant while educational attainment is, again pointing to the large racial disparity across educational levels as the driver of the overall gap in Black and White voter turnout in Mississippi. If education were not operating through race to affect validated voter turnout, including educational attainment in the regression would not have such a big effect on the size or statistical significance of the coefficient on race and turnout as shown in Appendix Table 2.²³

²³ King, Gary, Robert O. Keohane, and Sidney Verba. *Designing social inquiry: Scientific inference in qualitative research*. Princeton university press, 2021.

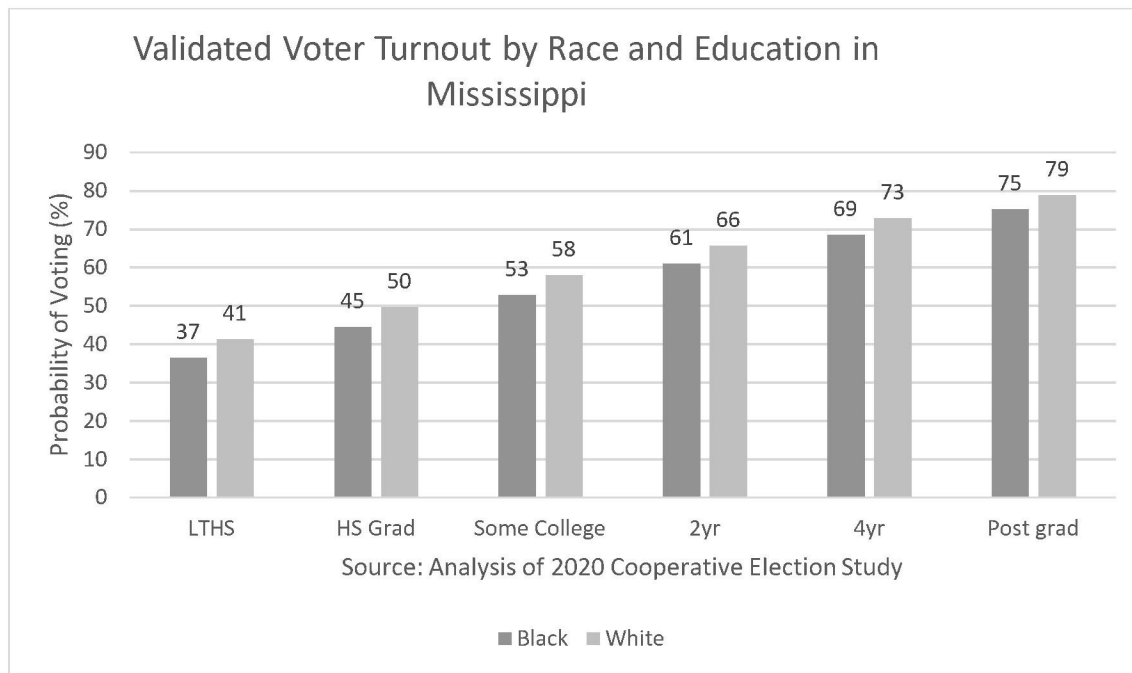
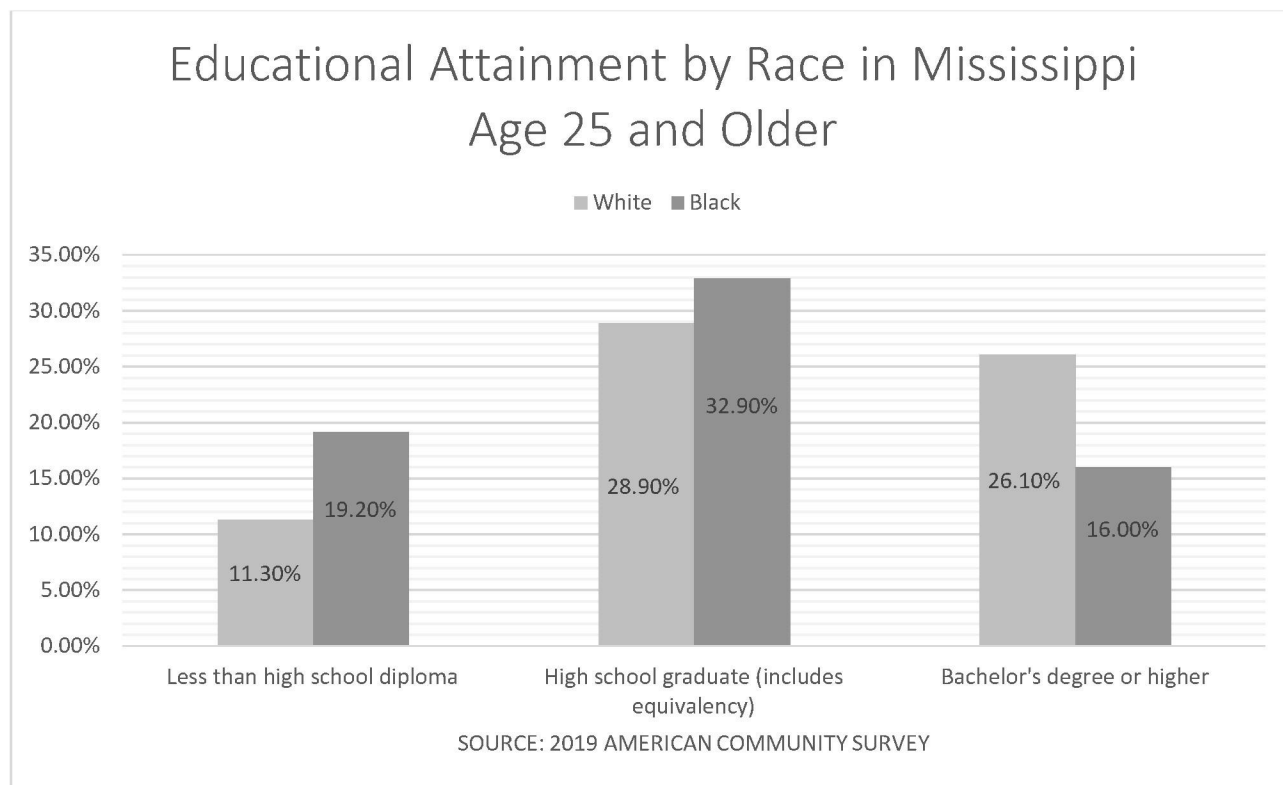


Figure 2 Probability of voting by race and education in Mississippi. *Estimated probability of voting calculated for men born in 1972 by race and educational attainment. Source: Author's analysis of 2020 CES included in column 2 of table 2 in the appendix.*

Dr. Swanson's conclusion that differences in educational attainment do not disadvantage Black Mississippians is based on a fundamental misunderstanding: he argues (based on faulty data) that because Black people and White people in Mississippi with similar educational levels vote similarly, that race does not matter for voter turnout. This logic ignores my original conclusion, which is borne out by the analysis here, that Black Mississippians have faced and are facing educational discrimination throughout the state. The state has maintained many aspects of educational segregation and under-investment in public education for Black students in both the historical and the contemporary period, as I note in my initial report.

This educational discrimination has led to gaps in literacy and educational attainment, with Black Mississippi residents having lower literacy and educational attainment than White Mississippi residents. This discrimination has allowed and continues to allow fewer Black Mississippians to reach educational parity with White Mississippians. As I have shown above, in line with decades of political science research, educational attainment has a strong, positive relationship to voter turnout. People with higher educational attainment are more likely to vote. Educational attainment in Mississippi thus is shaped by race in the ways that I highlight in my original report. I include those data from my original report again here as Figure 3 to clearly show the differences in educational attainment by race in Mississippi.

Figure 3: Educational Attainment by Race in Mississippi. Source: 2019 American Community Survey 1-Year Estimates



To summarize the discussion, analyzing validated voter turnout from the Mississippi sample of the CES clearly shows that White Mississippians were more likely to turn out in the 2020 General Election than Black Mississippians. This large racial gap is statistically significant. My analysis shows that educational attainment is an important factor in shaping this racial gap: accounting for educational attainment and other factors shows that while Black and White people with similar educational backgrounds vote similarly, people with lower educational attainment vote at lower rates overall than people with higher educational attainment. Because of the historical and contemporary discrimination in education faced by Black people that I highlight in my report, Black Mississippians are more likely to have lower educational attainment, and thus lower voter turnout, than White Mississippians.

Methodology and Analysis of Voter File Turnout: Ecological Inference

To further bolster the CES analysis, I turn to a second method of estimating the racial gap in turnout that avoids overreporting bias: ecological inference (EI). EI is a method of “inferring individual behavior from aggregate data”²⁴ that has been used as a standard statistical tool to estimate voting behavior in vote dilution cases.²⁵ Lewis describes “inferring the rate of voter

²⁴ King, Gary and Margaret Roberts. “EI: A(n R) Program for Ecological Inference.” Available from <https://github.com/iqss-research/eir>. Accessed 20 Jan 2023.

²⁵ Lewis, Jeffrey B. “Extending King’s Ecological Inference Model to Multiple Elections Using Markov Chain Monte Carlo.” In *Ecological Inference: New Methodological Strategies*. King,

turnout among two racial groups in a set of electoral precincts from observations on the racial composition and total voter turnout in each precinct” as I will do here, as “the canonical ecological inference problem.”²⁶ EI takes information on vote totals and racial demographics in geographic units and uses Bayesian statistical methods to estimate voting behavior—in this case, turnout by race.

EI requires data on the percent of each racial group in the geographic area and data on the overall voter turnout in the geographic area. I calculate block group voter turnout by geocoding²⁷ the Mississippi voter registration file to census block groups,²⁸ then aggregating up to produce counts of votes from each block group for the November 2020 General election. I use census block group data on the citizen voting age population by race, distinguishing non-Hispanic white population from the non-White population.²⁹ I also break out the data for the block groups in the counties of the Supreme Court District 1 (Central District)³⁰ and perform EI separately.

The estimates obtained using ecological inference show that there is a statistically significant racial gap in turnout in Mississippi: White Mississippi citizens are far more likely to vote than non-White Mississippi citizens. Based on the statewide EI analysis shown in Figure 4, the weighted mean of the proportion of non-White people who voted is 42%, while the weighted mean of the proportion of White people who voted is 58%. In the Central District, where turnout was slightly higher than the state overall, the weighted mean proportion of non-White people

Gary, Ori Rosen and Martin A. Tanner, eds. Cambridge: Cambridge University Press, 2004; 97-122.

²⁶ Lewis 2004: 97.

²⁷ Prener, Christopher, Branson Fox and Christopher Kenny. “Censusxy: Access the U.S. Census Bureau’s Geocoding API System.” Available from <https://chris-prener.github.io/censusxy/>. Accessed 20 Jan 2023. I used benchmarks and vintages from the 2020 Census.

²⁸ See Lewis 2004: 97: EI may be performed for any “aggregate groupings of votes for which the racial composition is known.” I was unable to match 240,527 registered voters to 2020 census block groups, and an additional 8,991 were not matched because they did not have a state listed in the voter file. 144,175 (60%) of the unmatched people voted statewide. 78,898 of the unmatched were from the Central District, of which 46,418 (59%) voted in the 2020 General election. I deleted some block groups with 0 population.

²⁹ U.S. Census Bureau. “Citizen Voting Age Population by Race and Ethnicity.” Available online from <https://www.census.gov/programs-surveys/decennial-census/about/voting-rights/cvap.html>. Accessed 20 Jan 2023. The final sample size was 2,438 block groups for the statewide analysis and 773 for the Central District analysis.

³⁰ Bolivar, Claiborne, Copiah, Hinds, Holmes, Humphreys, Issaquena, Jefferson, Kemper, Lauderdale, Leake, Madison, Neshoba, Newton, Noxubee, Rankin, Scott, Sharkey, Sunflower, Warren, Washington, and Yazoo Counties. State of Mississippi Judiciary. “Mississippi Supreme Court Judicial Map.” Available online from <https://courts.ms.gov/appellatecourts/sc/scdistricts.php>; accessed 20 Jan 2023.

who voted is 44%, while the weighted mean proportion of White people who voted is 62%.³¹ More importantly, the statewide and Central District estimates for each racial group produced using EI and the CES are realistic given what we know about the actual voter participation statewide and the Central District from the Mississippi Secretary of State.

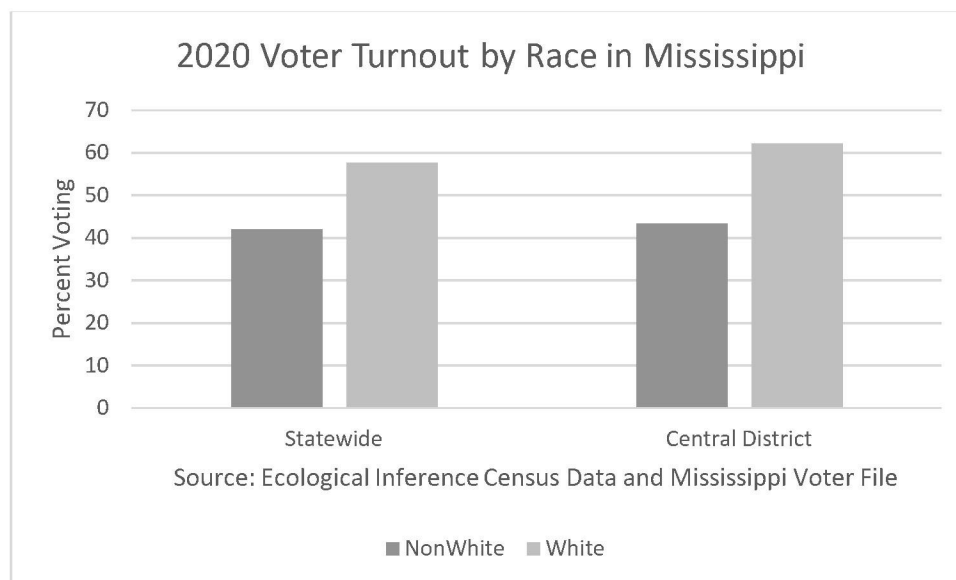


Figure 4: 2020 Voter Turnout by Race in Mississippi. Turnout by race estimated using EI on block group data from the census bureau on citizen voting age population by race, merged with turnout data from the Mississippi voter file. Results also reported in Table 1 below.

To summarize, all methods of estimating voter turnout by race in Mississippi that are not biased by racialized differential overreporting of turnout show that White people have a statistically significant advantage in voter turnout. Table 1 summarizes all the estimates of statewide voter turnout and voter turnout by race obtained from the different methods that I have discussed here. As shown in the table, the estimates of White and non-White voter turnout produced by EI are remarkably similar to those produced by my regression analysis of Black and White turnout in the CES, even though these estimates come from two different methods and sources of data. Both the regression analysis of the CES and the EI analysis using the Mississippi voter file, both of which avoid issues of differential over-reporting of voting, show large turnout gaps of between 13 to 15 percentage points statewide, and the EI analysis predicts a turnout gap of 18 points in the Central District. Both the regression analysis and the EI analysis predict White voter turnout at a rate close to 60 percent. In contrast, the CES predicts Black

³¹ Performing the analysis with non-Hispanic Black alone or in combination and non-Black as the reference categories also produces estimates of lower Black voter turnout relative to non-Black residents both statewide and in the Central District. Statewide, Black turnout was estimated to be 42% (41% to 43%), while non-Black turnout was 57% (50% to 64%). In the Central District, Black turnout was estimated to be 43% (42% to 44%) while non-Black turnout was estimated to be 63% (41% to 85%).

turnout in the mid-forty percent range statewide, while the EI analysis similarly predicts non-White turnout in the low forty percent range statewide. The estimates of turnout by race, and of turnout overall, that are based on my CES and EI analysis also are closer to the benchmark turnout rates that are based on vote counts from the Mississippi Secretary of State. Dr. Swanson fails to account for differential overreporting of turnout by race, and overreporting of turnout generally, which is why his estimates of turnout are unreasonable.

Black Voter Suppression and Experiences with In-Person Voting

There are many factors that affect voter turnout generally, and Black voter turnout in particular. However, in his report, Dr. Swanson says that he looks for Black voter suppression efforts along just one “causal” dimension: polling place distance. He hypothesizes:

My hypothesis for this question was that if the Black voting age population were being systematically disenfranchised by the state of Mississippi, a symptomatic indicator of that would be seeing fewer of them close to polling places, and more of them a great distance from polling places.³²

Dr. Swanson provides no literature or studies to support this supposition. Meanwhile, my examination of the literature on polling place distance finds that distance overall has a small effect on turnout, but that effect primarily has to do with access to transportation.³³ For instance, Haspel and Knotts (2005) find that voters with cars are relatively insensitive to polling place distance, while voters without cars are more sensitive. Hence, as Haspel and Knotts show, with respect to polling place distance, the actual distance from the polling place overall matters less than the availability of a car. As I show in Figure 6 of my initial report, 3.5% of White Mississippi households have no access to a car, compared to 11.3% of Black Mississippi households.³⁴ Considering polling place distance without accounting for racial differences in access to transportation, as Dr. Swanson does in his report, is inconsistent with published scholarly research in this area that controls for access to vehicles.

It is also important to note that Dr. Swanson ignores other aspects of the in-person voting experience that also affect turnout. For instance, long wait times at polling places may discourage voters.³⁵ Further analysis of the CES, which I report in Figure 5, shows that among validated Mississippi voters, 18.9% of white voters report that they waited more than 30 minutes to vote in the 2020 General Election, compared with 40.7% of black voters.³⁶ Consistent with

³² Swanson Report, p. 43.

³³ Haspel, Moshe, and H. Gibbs Knotts. "Location, location, location: Precinct placement and the costs of voting." *The Journal of Politics* 67.2 (2005): 560-573. See also Bagwe, Gaurav, Juan Margitic, and Allison Stashko. *Polling Place Location and the Costs of Voting*. Working Paper, 2020, which finds that transportation affects the relationship between distance to the polls and turnout as well.

³⁴ Source: 2019 American Community Survey 1 Year Estimates.

³⁵ Chen, M. Keith, et al. "Racial disparities in voting wait times: evidence from smartphone data." *Review of Economics and Statistics* 104.6 (2022): 1341-1350.

³⁶ Here, I switch to using the post weight for validated voters.

these estimates from the CES, an analysis of cell phone data also shows a racial disparity in wait times in Mississippi's 2nd congressional district.³⁷

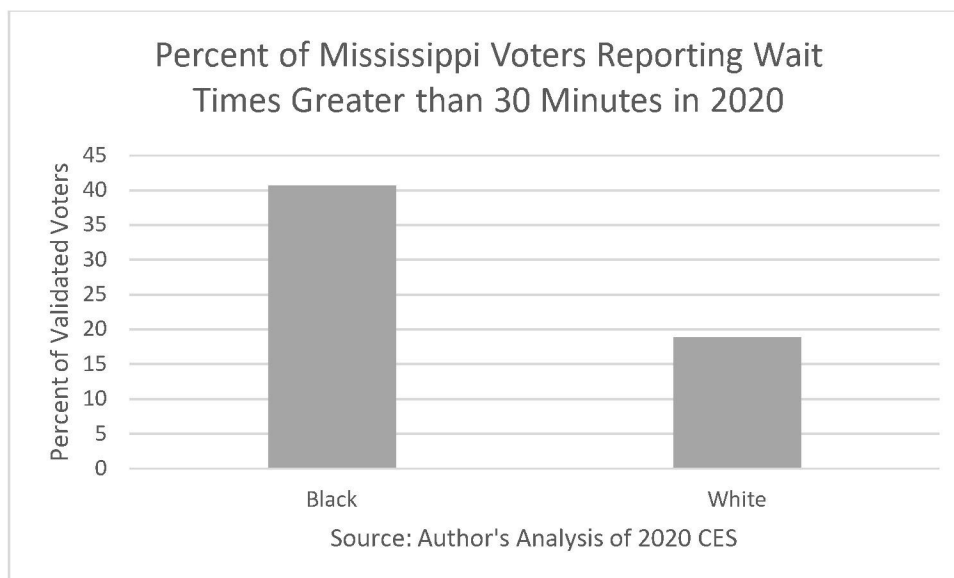


Figure 5: Percent of Mississippi Voters Reporting Wait Times Greater than 30 Minutes in 2020. Source: author's analysis of 2020 CES. Data on wait times reported for validated voters only.

Conclusion

Dr. Swanson's report does not rebut my conclusion or change my opinion that Black Mississippians' ability to participate effectively in the political process is hindered because of the discrimination they face. As I show conclusively here through the analysis of several different data sets using different methods, in Mississippi, White people vote at higher rates than Black people. This difference is partly the result of racial differences in educational attainment, which I already have shown is the result of years of racial discrimination by state actors.

Dr. Swanson points out that more White people in Mississippi live more than a mile from their polling place than Black people as further evidence that Black people do not face discrimination in voting; as I have shown, this argument ignores the fact that polling place distance really matters only for people who lack access to transportation, another arena in which Black people are disadvantaged in Mississippi relative to White people. Finally, when we consider additional aspects of the in-person voting experience in Mississippi, such as wait times, there is clear evidence that Black people are disadvantaged relative to White people.

³⁷ Chen et al. 2022.

Table 1 Estimates of Mississippi Voter Turnout, by Race, 2020 General Election. Estimates of voter turnout from different sources. Confidence intervals in parentheses.

Universe	Method/Source	Turnout Estimates:					
Statewide	Current Population Survey 2020 (Dr. Swanson) ³⁸	White Turnout:	69.8% (65.7% to 73.9%)	Black Turnout:	72.8% (67.9% to 77.7%)	Total Turnout:	70.3% (67.1% to 73.5%)
Statewide (Benchmark)	MS Secretary of State (2020 Presidential General) ³⁹	N/A		N/A		Total Turnout:	58.7%
Statewide	CES 2020 ⁴⁰	White Turnout:	59.6%	Black Turnout:	46.1%	Total Turnout:	53.3%
Statewide	Ecological Inference (MS Voter File)	White Turnout:	58% (57% to 59%)	Non-White Turnout:	42% (33% to 51%)	Total Turnout:	58% ⁴¹
Central District (Benchmark)	MS Secretary of State (2020 Presidential General) ⁴²	N/A		N/A		Total Turnout:	59.4%
Central District	Ecological Inference (MS Voter File)	White Turnout:	62% (61% to 64%)	Non-White Turnout:	44% (29% to 58%)	Total Turnout:	58% ⁴³

³⁸ Swanson Report, p. 70.

³⁹ Mississippi Secretary of State. “Official Results” and U.S. Census Bureau. “Citizen Voting Age Population by Race and Ethnicity.”

⁴⁰ Calculated based on Model 1 of Appendix Table 2.

⁴¹ Total votes/citizen voting age population from the statewide block group data (after excluding people who were unmatched to block groups as discussed in Note 28). This estimated turnout rate is close to the actual turnout rate because the turnout rate among the missing voters is 59.9%. For EI estimates that decrease the total block group CVAP by 11% to account for missing data, see the appendix.

⁴² Mississippi Secretary of State. “Official Results” and U.S. Census Bureau. “Citizen Voting Age Population by Race and Ethnicity.”

⁴³ Total votes/citizen voting age population from the Central District block group data (after subtracting the people who were unmatched to block groups as discussed in Note 28). For EI estimates that decrease the total block group CVAP by 11% to account for missing data, see the appendix.

Table 2 Estimates of Mississippi Voter Turnout, by Race, 2020 General Election. Models estimated using Logistic Regression. Data from 2020 Cooperative Election Survey. Validated vote in 2020 General Election is the dependent variable. White is the reference racial category. * $P < .001$, ** $P < .01$, * $P < .05$. Standard errors below in parentheses.**

	Model 1	Model 2
Black	-0.545**	-0.207
	(0.180)	(0.200)
Other Race	-1.246	-0.757
	(0.649)	(0.697)
Education		0.334***
		(0.069)
Birth Year		-0.040***
		(0.006)
Gender		0.167
		(0.196)
Constant	0.388***	77.210***
	(0.118)	(11.740)

Table 3: EI Estimates of Voter Turnout in Mississippi in the 2020 General Election. Analysis adjusts the block group data for unmatched registered voters by decreasing the total citizen voting age population of each block group by 11%.

	White Turnout	Non-White Turnout
Statewide	64% (63% to 65%)	52% (36% to 69%)
Central District	70% (68% to 71%)	53% (23% to 83%)

**IN THE UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF MISSISSIPPI
GREENVILLE DIVISION**

DYAMONE WHITE, et al.,)	
)	No. 4:22-cv-00062-SA-JMV
<i>Plaintiffs,</i>)	
v.)	<u>Declaration of Traci Burch</u>
)	
STATE BOARD OF ELECTION)	
COMMISSIONERS, et al.,)	
)	
<i>Defendant.</i>		

DECLARATION OF TRACI BURCH

I, Traci Burch, make the following declaration based on personal knowledge:

I have been retained by the Plaintiffs in the above referenced matter as an expert. I submit that the foregoing report from me is a true and accurate copy of the report I provided to Plaintiffs in this matter. I declare that the information and opinions contained in the report are true and correct to the best of my knowledge.

I declare under penalty of perjury that the foregoing is true and correct. 28 U.S.C. § 1746.

Dated: 2/6/2023



Traci Burch